

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-6 (Canceled).

Claim 7 (Currently Amended): An image processing circuit ~~of an image input device~~
~~which performs~~ configured to perform a predetermined image processing of pixel data in an
image photographed by an image pickup device ~~in said image input device~~, said circuit
comprising:

a real time processing unit ~~in which a predetermined general image processing of a~~
~~configured to sequentially input the pixel data being photographed by said image pickup~~
~~device, and inputted sequentially is performed by real time processing perform, by real time~~
~~processing, a predetermined general image processing of the inputted pixel data, and output~~
the generally processed pixel data;

a main memory ~~that stores a~~ configured to store the generally processed pixel data
outputted from ~~at least~~ said real time processing unit, in image frame units; and

a central control unit ~~in which with respect to image temporarily stored in said main~~
~~memory, configured to execute exceptional image processing except for said general image~~
~~processing is executed as a software program processing with respect to the stored generally~~
processed pixel data, and then stored in store the exceptionally processed pixel data in said
main memory, ~~characterized in that:~~

wherein said real time processing unit ~~has is~~ further configured to perform a
cumulative addition processing function of, ~~when each pixel data photographed by said~~
~~image pickup device and inputted sequentially extends multiple frames, repeating, a~~
~~predetermined number of times, a cumulative addition processing~~ in which a pixel data
residing on ~~the a~~ same position in ~~the a~~ preceding frame ~~temporarily of pixel data~~ stored in

said main memory is added to ~~each a corresponding~~ pixel data in each ~~of said frames from~~
~~said image pickup device~~ frame inputted sequentially when the pixel data inputted
sequentially extends multiple frames, repeat the cumulative addition processing function a
predetermined number of times, and the store result is stored results of the cumulative
addition processing function in said main memory.

Claim 8 (Currently Amended): An image processing circuit ~~of an image input device~~
~~which performs configured to perform~~ a predetermined image processing of pixel data in an
image photographed by an image pickup device ~~in said image input device~~, said circuit
comprising:

a real time processing unit ~~in which a predetermined general image processing of a~~
configured to sequentially input the pixel data being photographed by said image pickup
device, ~~and inputted sequentially is performed by real time processing perform, by real time~~
processing, a predetermined general image processing of the inputted pixel data, and output
the generally processed pixel data;

a main memory ~~that stores a~~ configured to store the generally processed pixel data
outputted from ~~at least~~ said real time processing unit, in image frame units; and

a central control unit ~~in which with respect to image temporarily stored in said main~~
~~memory, configured to execute~~ exceptional image processing ~~except for said general image~~
~~processing is executed as a software program processing~~ with respect to the stored generally
processed pixel data, and then stored in store the exceptionally processed pixel data in said
main memory, ~~characterized in that:~~

wherein said real time processing unit has is further configured to perform a
circulating addition processing function of, ~~when each pixel data photographed by said image~~
~~pickup device and inputted sequentially extends multiple frames, repeating, a predetermined~~

~~number of times, a circulating addition processing~~ in which a pixel data residing on ~~the a~~ same position in ~~the a~~ preceding frame ~~temporarily of pixel data~~ stored in said main memory and ~~each a corresponding~~ pixel data in each of said frames from said image pickup device ~~frame inputted sequentially~~ are respectively subjected to multiplication with a predetermined weighting factor, ~~followed by and~~ addition ~~when the pixel data inputted sequentially extends multiple frames,~~ and ~~store the results of the circulating addition processing function~~ are stored in said main memory; and,

said weighting factor ~~used in said circulating addition processing~~ comprising a first factor to be multiplied ~~to by~~ a pixel data residing at the same position in the preceding frame ~~temporarily~~ stored in said main memory, and a second factor to be multiplied ~~to by~~ each corresponding pixel data in each frame from said image pickup device ~~inputted sequentially,~~ a sum of said first and second factors being set such that the sum of these factors is always one.

Claim 9 (Currently Amended): An image processing circuit ~~of an image input device~~ which performs configured to perform a predetermined image processing of pixel data in an image photographed by an image pickup device ~~in said image input device,~~ said circuit comprising:

a real time processing unit ~~in which a predetermined general image processing of a~~ configured to sequentially input the pixel data being photographed by said image pickup device, and inputted sequentially is performed by real time processing perform, by real time processing, a predetermined general image processing of the inputted pixel data, and output the generally processed pixel data;

a main memory ~~that stores a~~ configured to store the generally processed pixel data outputted from ~~at least~~ said real time processing unit, in image frame units; and

a central control unit ~~in which with respect to image temporarily stored in said main memory, configured to execute exceptional image processing except for said general image processing is executed as a software program processing with respect to the stored generally processed pixel data, and then stored in~~ store the exceptionally processed pixel data in said main memory, characterized in that:

wherein said real time processing unit has further comprises a pixel compensation function with, including a shading compensation, in which each pixel data photographed by ~~said image pickup device and inputted sequentially is multiplied by a predetermined pixel compensation parameter previously stored in said main memory, for a predetermined pixel compensation including shading compensation.~~

Claim 10 (Currently Amended): An image processing circuit ~~of an image input device which performs~~ configured to perform a predetermined image processing of pixel data in an image photographed by an image pickup device ~~in said image input device~~, said circuit comprising:

a real time processing unit ~~in which a predetermined general image processing of a configured to sequentially input the pixel data being photographed by said image pickup device, and inputted sequentially is performed by real time processing perform, by real time processing, a predetermined general image processing of the inputted pixel data, and output the generally processed pixel data;~~

a main memory ~~that stores a~~ configured to store the generally processed pixel data outputted from ~~at least~~ said real time processing unit, in image frame units; and

a central control unit ~~in which with respect to image temporarily stored in said main memory, configured to execute exceptional image processing except for said general image~~

~~processing is executed~~ as a software program processing, and ~~then stored in~~ store the exceptionally processed pixel data in said main memory, ~~characterized in that:~~

wherein said real time processing unit has a function of selecting at least said cumulative addition processing function as defined in claim 7, and said circulating addition processing function as defined in claim 8.

Claim 11 (Currently Amended): An image processing circuit ~~of an image input device which performs~~ configured to perform a predetermined image processing of pixel data in an image photographed by an image pickup device ~~in said image input device~~, said circuit comprising:

a real time processing unit ~~in which a predetermined general image processing of a configured to sequentially input the pixel data being~~ photographed by said image pickup device, ~~and inputted sequentially is performed by real time processing perform, by real time processing, a predetermined general image processing of the inputted pixel data, and output the generally processed pixel data;~~

a main memory ~~that stores a~~ configured to store the generally processed pixel data outputted from ~~at least~~ said real time processing unit, in image frame units; and

a central control unit ~~in which with respect to image temporarily stored in said main memory, configured to execute~~ exceptional image processing ~~except for said general image processing is executed~~ as a software program processing, and ~~then stored in~~ store the exceptionally processed pixel data in said main memory, ~~characterized in that:~~

wherein said real time processing unit has a function of selecting said cumulative addition processing function as defined in claim 7, said circulating addition processing function as defined in claim 8, and said pixel compensation function as defined in claim 9.

Claims 12-27 (Canceled).